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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.   | CONFIRMATION NO. |
|-----------------|-------------|----------------------|-----------------------|------------------|
| 09/811,837      | 03/20/2001  | Shunpei Yamazaki     | 12732-022001 / US4790 | 8400             |

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EXAMINER

CHIANG, JACK

ART UNIT PAPER NUMBER

2642

DATE MAILED: 03/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/811,837

Applicant(s)

YAMAZAKI ET AL.

Examiner

Jack Chiang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 November 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-104 is/are pending in the application.
- 4a) Of the above claim(s) 3-104 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-2 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **CLAIMS**

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Danielson (WO 94/19736) in view of Jacobsen et al. (US 6232937).

Regarding claims 1-2, Danielson discloses an electronic device comprising:

A display portion having active elements which has liquid crystals (15);

The operation keys (16);

The direction of an image displayed is switchable between a first orientation and a second orientation (figs. 2-3).

Danielson differs from the claimed invention in that it does not explicitly show that the keys having LEDs.

However, it is commonly seen that image is displayed by LED matrix. This is shown by Jacobsen (figs. 5e, 5g), and an image displayed can be switchable between a first orientation and a second orientation (figs. 9b, 9e).

Hence, the concept of switching the keys from a first orientation to a second orientation is well taught by Danielson (figs. 2-3). This also includes the concept of having key image (displayed by display 15) in two orientations. It would have been obvious for one skilled in the art to apply Jacobsen's method of the LED matrix in Danielson, such that the displayed image can be controlled by the switching/control of the LED matrix, this

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method is notoriously well known in the art, including the key image displayed in two orientations by the display 15 shown by Danielson, and yet the basic concept of providing the keys in different orientations is substantially unchanged.

Danielson further differs from the claimed invention in that show audio input/output portions.

However, Jacobsen further shows the audio input/output portions (i.e. 1234, 1230 in fig. 8h).

Hence, it would have been obvious for one of ordinary skill in the art to apply the combination of Danielson and Jacobsen in the phone environment which usually have audio input/output portions, this simply can be considered as an intended use of the combination as it is shown in Jacobsen's phone environment, because it is commonly seen that today's electronic devices having various functions, including phone function. The combination of Danielson and Jacobsen further differs from the claimed invention in that it does not explicitly mention that the display comprises a gate signal line, a source signal line, and the active element is connected to the gate signal line and the source signal line.

However, from page 24, second paragraph of the present application, applicant has admitted that such connection of the display active element to the gate signal line and the source signal line is well known in the art. Therefore, it would have been obvious for one of ordinary skill in the art to adapt such well known circuit design to drive the display active element in the combination of Danielson and Jacobsen, because it is understood

that such display active elements needed to be driven by such gate signal line and the source signal line as it is commonly done in the art and admitted by applicant.

### **ARGUMENT**

3. In response to the remarks, first two paragraphs, applicant has restated the claimed limitations, see comments on the rejections above.

In the third paragraph of the remarks, applicant mentions about Danielson's elements 15 and 19, then argues that Danielson nowhere indicates that the liquid crystal display includes active elements.

The examiner disagrees. first, the examiner likes to ask applicant: what element(s) makes up the liquid crystal display? Second, if the liquid crystal display does not include active elements, then what element(s) is being lid up in the display?

In the fourth paragraph of the remarks, applicant argues that Danielson do not even describe or suggest having the operation keys display an image. The examiner agrees. That is why it is a 103 rejection under the combination of Danielson and Jacobsen. In that combination, Danielson has taught the concept of having the key in two different orientations. Jacobsen is cited to show a well known technology that achieves the same concept as Danielson. It appears that applicant has attacked the references individually, see rejections above.

4. Applicant's arguments with respect to claims 1-2 have been considered but are moot in view of the new ground(s) of rejection.

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

6. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

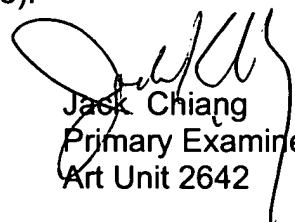
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jack Chiang whose telephone number is 703-305-4728. The examiner can normally be reached on Mon.-Fri. from 8:00 to 6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ahmad Matar, can be reached on 703-305-4731. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

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For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jack Chiang  
Primary Examiner  
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